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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,838		02/23/2004	Isao Yokokawa	118749	5427
25944	7590	05/19/2006		EXAM	INER
OLIFF &	BERRID	GE, PLC	LUU, CHUONG A		
P.O. BOX ALEXANI		22320	ART UNIT	PAPER NUMBER	
ALEXANI	ZKIA, VA	1 22320		2818	
				DATE MAILED: 05/19/2000	6

Please find below and/or attached an Office communication concerning this application or proceeding.

Sund to	Application No.	Applicant(s)
Supplemental otice of Allowability	10/782,838 YOKOKAWA ET	
lotice of Allowability	Examiner	Art Unit
	Chuong A. Luu	2818

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to <u>5/11/2006</u>. 2. The allowed claim(s) is/are 1-8. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ∏ Ali b) ☐ Some\* c) ☐ None of the: 1. 

Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. ✓ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application (PTO-152) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 6. Interview Summary (PTO-413), Paper No./Mail Date 3. Information Disclosure Statements (PTO-1449 or PTO/SB/08), 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. 

Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. Other \_\_\_\_\_.

### **DETAILED ACTION**

#### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

### **AUTHORIZATION**

Authorization for this examiner's amendment was given in a telephone interview with Mr. Tarik M. Nabi on May 11, 2006.

#### TO CLAIMS

Claim 1, line 6, after wafer, insert --to--;

Also, line 12, after being, insert –set--.

## Allowable Subject Matter

Claims 1-8 are allowed.

The following is an examiner's statement of reasons for allowance: The examiner has reviewed the prior art in light of applicant's claimed invention and finds that the combined claims define over the prior art. The cited prior art does not disclose or suggest a semiconductor device inter alia the limitations "...implanting at least one kind of ion of hydrogen ion and a rare gas ion into the surface portion of a bond wafer to form an ion-implanted layer, bonding the bond wafer and a base wafer **to** each other through an oxide film, and delaminating the resultant bonded wafer at the ion-implanted layer,

wherein assuming that X [nm] represents the thickness of the buried oxide film and Y [nm] represents the thickness of the SOI layer in the SOI wafer immediately after delaminating at the ion-implanted layer, when the thickness X of the buried oxide film is X≤100, in forming the ion-implanted layer, the ion implantation is carried out with the ion implantation conditions being **set** such that the sum X+Y of the thickness of the buried oxide film and the thickness of the SOI layer satisfies X+Y>1500-14X, after which the bonding process and the delaminating process are carried out and, thereafter, a thinning treatment of the SOI layer is carried out to make the SOI layer into a thin film having a predetermined thickness...".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong A. Luu whose telephone number is (571) 272-1902. The examiner can normally be reached on M-F (6:15-2:45).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chuong Anh Luu Patent Examiner May 11, 2006